

**Autumnwood ESH Consultants, LLC**

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15 September 2016

Mr. John Nordine
U.S. EPA Region 5
RCRA Enforcement and Compliance Assurance Branch (LU-9J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois RCRA CMI Monthly Progress Report for August 2016

Dear Mr. Nordine:

Enclosed please find the RCRA CMI Monthly Progress Report for the Central Wire facility located in Union, Illinois for August 2016.

This report includes eDMR for the groundwater pump and treat facility and the laboratory analytical reports, which includes the effluent data used in the eDMR for August 2016 and the analytical data from samples collected at GP-28, GP-29 and GP-30.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

Autumnwood ESH Consultants, LLC

A handwritten signature in cursive script that reads "John W. Thorsen".

John W. Thorsen, P.E.

JWT:jt

encl

cc:	Joyce Munie	IEPA
	Robert Kay	USGS
	Gerald W. Ruopp	Central Wire
	Robert Johnson	Central Wire

MONTHLY PROGRESS REPORT
Central Wire Union, Illinois Site
August 2016

1. **Progress Made This Reporting Period** – This reporting period Central Wire continued the operation and maintenance of the groundwater extraction and treatment system. Central Wire treated an average of 614,000 gallons per day with a maximum daily flow of 624,000 gallons per day and met effluent limitations for pH, 1,1,1-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for August 2016 is attached to this report.

The laboratory analytical report for the pump and treat effluent noted that the groundwater pump & treat effluent samples were collected on August 18 and arrived at the lab on August 19, 2016 at 0.1° C.

The irrigation pumping hours per week are tabulated in Table 1, below.

Table 1
Summary of 2016 Irrigation Pumping Hours per Week at Ex. 6 Personal Privacy (PP)
(July 25 through September 1, 2016)

Date of Hour Meter Reading	Ex. 6 Personal Privacy (PP)		Ex. 6 Personal Privacy (PP)		Hours of Irrigation Well Pumping/Week
	Hour Meter Reading	Hours Pumped	Hour Meter Reading	Hours Pumped	
7/25/2016	6238	0	3900	0	0
8/2/2016	6304	66	3931	31	97
8/8/2016	6347	43	3960	29	72
8/15/2016	6425	78	3991	31	109
8/22/2016	6449	24	4003	12	36
8/29/2016	6459	10	4016	13	23
9/1/2016	6459	0	4024	8	8
Totals		221		124	345

On September 1 Central Wire personnel downloaded the data logger in the field for August data to a laptop computer and reinserted the same data logger into monitoring well DGW-2I.

The groundwater level monitoring data from downgradient monitoring well DGW-2I for August 2016 and the August 2016 precipitation and irrigation well pumping over the month have been graphed / plotted and are attached to this report as Table 2. Please note that no precipitation data was available from the Marengo NOAA station so we used precipitation data from the next closest station in Harvard, IL.

The depth to water measured from the top of the well casing was 6.75 feet in DGW-2I on September 1, 2016; therefore, there nominally was 23.59 feet of water above the data logger. The last data logger reading on September 1 at 1124 hours was 23.590 feet.

The groundwater elevation in August 2016 reached its highest level on September 1 at 814.525 feet above mean sea level after a 0.9 inch rainfall. The groundwater elevation reached its low on August 20 at 813.485 feet above mean sea level for a variance of 1.040 feet over the month.

2. Summary of Validated Data and Results

Pump & Treat System NPDES Sampling

The monthly effluent sampling took place on August 18, 2016. The permit limitations and analytical results are shown in Table 3, below.

Table 3
Central Wire Union Illinois Pump & Treat Discharge Analytical Results

Parameter	Effluent Limitation (Daily Maximum), µg/L	August 2016 Analytical Results, µg/L
1,1,1-Trichloroethane	20	< 0.38
Tetrachloroethene	20	< 0.37
Trichloroethene	20	0.26 J

J = Result is less than the Reporting Limit but \geq to the Method Detection Limit and the concentration is an approximate value

The August NPDES analytical report is attached to this Monthly Progress Report.

This report also had environmental analytical results for the North Pond and South Pond. These ponds are Illinois EPA-regulated seepage ponds for Central Wire's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and storm water.

2016 RCRA CMI Field Investigation

Since a chemical of concern (1,1-Dichloroethene) was found in GP-27 in the June 2016 sampling event, EPA asked Central Wire to place three additional Geoprobe points downgradient from GP-27 as shown on Figure 1. This work was done on August 31 and September 1, 2016.

Enclosed please find the Analytical report for the August 2016 Geoprobe sampling event.

The Geoprobe was placed at three points per EPA's direction: GP-28, GP-29 and GP-30. Three groundwater samples were collected at each of these Geoprobe locations: at 85 feet below ground surface (bgs), at 57 feet bgs and at 27 feet bgs.

In total 9 samples were collected. There were 16 detections as shown in Table 4, below. There were no detections for tetrachloroethene (PCE) or trans-1,2-dichloroethene (trans-1,2-DCE). Two samples exceeded the MCL, both for 1,1-DCE, one at GP-29S and one at GP-30I.

Table 4
Detections of Chemicals of Concern at Central Wire Union, IL
August 2016 Geoprobe Event, in µg/L

Sampling Location	TCE	1,1-DCE	1,1,1-TCA	cis-1,2-DCE
MCL	5	7	200	70
GP-28S	-	-	-	-
GP-28I	-	1.2	-	0.93 J
GP-28D	-	3	-	2.2
GP-29S	-	9.1	-	2.4
GP-29I	-	0.9 J	-	1.9
GP-29D	-	-	-	0.53 J
GP-30S	1.2	2.7	13	
GP-30I	-	8.7	-	4.7
GP-30D	-	4.9	-	2.7

J = Result is less than the Reporting Limit but \geq to the Method Detection Limit and the concentration is an approximate value.

- = Below the Reporting Limit

Table 5 (attached) summarizes all samples in the 2016 RCRA CMI Plume Investigation.

3. **Upcoming Events/Activities Planned** – Central Wire will continue to operate the existing remediation systems. Effluent samples will be collected, analyzed and reported as required in our NPDES permit.

Central Wire has completed the air shocking of Extraction Well No.2. The flow from that well has improved about 5%. Municipal Well and Pump has suggested surge blocking which generates a lot of water. Central Wire is willing to do this if we can discharge the water on the ground up gradient from the well so that water passing through the soil can be extracted and treated and if Central Wire obtains permission from the land owner.

4. Anticipated Problem Areas and Recommended Solutions – None.
5. Key Personnel Changes – None.
6. Target and Actual Completion Dates – This project has not deviated from the project schedule.